

CLAIMS

I claim:

1. A method for dissolving a measured quantity of a solute in a solvent comprising the steps of:
combining a tracer with a solute in known proportions to form a mixture, the tracer being capable of increasing the turbidity of a solvent in proportion to the concentration of the solute dissolved in the solvent;
providing a container for receiving the mixture and a solvent;
introducing the solvent and the mixture into the container; and,
stirring the solvent until the turbidity thereof reaches a predetermined level.
2. The method according to claim 1 wherein the tracer and the solute are finely divided solids both being capable of dissolving in the solvent.
3. The method according to claim 1 wherein the tracer is selected from the group consisting of: IMP, zeolite, sodium sulfate, calcium silicate, calcium phosphate, dibasic calcium phosphate, tribasic phosphate, magnesium carbonate, calcium carbonate.
4. The method according to claim 1 wherein the solute is HPHTMPowder.
5. The method according to claim 1 wherein the solvent is selected from the group consisting of: water, ethanol, methanol, isoproponol, and glycol ether.

6. The method according to claim 1 wherein the amount of the mixture introduced to the container is sufficient to saturate the solvent.
7. The method according to claim 1 wherein the stirring step further includes:
 - directing a beam of light through the solvent to a photodetector; and,
 - converting the light received by the photodetector into a turbidity level.
8. A method for dissolving a measured quantity of a solute in a solvent comprising the steps of:
 - combining a tracer with a solute in known proportions to form a mixture, the tracer being capable of increasing the turbidity of a solvent in proportion to the concentration of the solute dissolved in the solvent;
 - providing a container for receiving the mixture and a solvent;
 - providing a turbidimeter coupled with the container;
 - introducing the solvent and the mixture into the container;
 - exposing the turbidimeter to said solvent so as to measure the turbidity of the solvent;
 - and,
 - stirring the solvent until the turbidity thereof, as measured by the turbidimeter, reaches a predetermined level.
9. The method according to claim 8 wherein the exposing step further includes:
 - directing a beam of light through the solvent to a photodetector being part of the turbidimeter; and,
 - converting the light received by the photodetector into a turbidity level.

10. A method for producing a liquid detergent comprising the steps of:
 - combining a tracer with an inorganic alkaline builder in known proportions to form a mixture, the tracer being capable of increasing the turbidity of water in proportion to the concentration of the inorganic alkaline builder dissolved in the water;
 - providing a container for receiving the mixture and water;
 - providing a turbidimeter coupled with the container;
 - introducing water and the mixture into the container;
 - exposing the turbidimeter to the water in the container so as to measure the turbidity of the water in the container;
 - stirring the water in the container until the turbidity thereof, as measured by the turbidimeter, reaches a predetermined level; and,
 - drawing turbid water from the container and combining the turbid water with a surfactant.
11. The method according to claim 10 wherein the exposing step further includes:
 - directing a beam of light through the solvent to a photodetector being part of the turbidimeter; and,
 - converting the light received by the photodetector into a turbidity level.
12. The method according to claim 10 wherein the tracer is selected from the group consisting of: IMP, zeolite, sodium sulfate, calcium silicate, calcium phosphate, dibasic calcium phosphate, tribasic phosphate, magnesium carbonate, calcium carbonate.

13. The method according to claim 10 wherein the inorganic alkaline builder is HPHTMPowder.